

REMARKS / ARGUMENTS

The Office Action of May 14, 2007, has been received and considered. Claims 18 and 20-21 and 47-58 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Carluccio US 4,390,298. Claims 18-23 and 47-58 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith US 5,513,768, in view of Carluccio US 4,390,298 in view of Leopardi et. al. US 5,514,339.

As fully explained in the patent application, the use of pipette tips are wide spread in the medical field of liquid handling. In normal operation, upon transfer of a calibrated fluid sample from a container, there exists a non calibrated residue fluid (116) that attaches itself to the outside surface (125) of the pipette tip (115). "This is due to the surface tension of the pipette material and the fluid characteristics of the sample. Common practice suggests that the outside of these tips be wiped clean with a KIMWIPE tissue prior to the dispensing cycle. This however, causes the following problems: 1) Requires the contact and disposal of an additional product (i.e. tissue) 2) Puts the user at risk while transporting highly infectious or radioactive fluids. 3) Reduces the amount of specimen that can be analyzed 4) Adds cost and addition time necessary to perform dispensing. (Page 3, lines 27-32).

As noted, in the applicants invention, the **wiping device and the pipette tip cooperate together to increase overall speed and safety of transferring fluids**. This pipetting apparatus with **squeegee like wiping means** cleans the outside surface with **complete circumferential contact** of a spiral wiper and solves more than one unrecognized problems in the liquid handling industry not found in prior art. Furthermore, this new invention provides new and unexpected results that not only improve safety, increase the speed of fluid transfers, saves precious fluid sample material, all while eliminating the use of addition tissues and contamination problems associated with their disposal.

Claims 18 and 47 has been amended to recite a pipetting apparatus for transferring an internal calibrated volume of fluid (119) having a wiping cap device, including a conical shaped

wiping finger (90) created by a least one helical slot (112) beginning at a substantial closed apex end (113) of the conical shaped wall wiper section. The spiral wiper finger or fingers (90) then rotate more than one revolution about the conical shaped pipette tip (115) and **are adapted to be unobstructed and resiliently held in complete circumferential contact against the smooth outside surface (125) of the pipette tip (115)**. In addition, the spiral wiping finger (90) includes squeegee like means for removing the non-calibrated residue fluid (116) attached to the outside surface (125) of the pipette tip (115) leaving only the internal calibrated fluid (119) to be transferred. Basis for this amendment appears on Page 20, the paragraph starting with line 5 and the paragraph starting with line 21 as shown in this amended specification on page 2 and page 3 of this document. In addition Figures 16 and 17 illustrate the embodiment.

This amendment was made so that the relationship between the internal calibrated fluid (119) that the pipetter is transferring and the external non-calibrated fluid (116) that inadvertently became attached to the outside surface (125) of the conical shaped pipette tip (115) is clearly and positively recited. In addition, the at least one spiral wiper finger (90) is being held in complete circumferential contact with the outside surface (125) of the pipette tip (115) as shown in Figures 16 and 17, providing squeegee like means to remove all of the non calibrated fluid (116) attached to the exterior surface (125) of the pipette tip (115) during the removal of the pipette tip (115) from the wiping device. This is clearly consistent with the restriction requirement for it includes the structure of the wiping cap device which the restriction was based and further limits original claims 18 and 47.

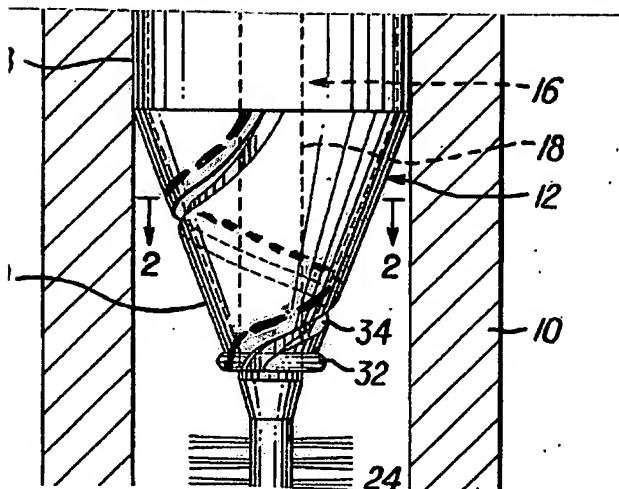
To anticipate a claim, the reference must teach every element of the claim (MPEP 2131). By this response, Claims 18 and 47 are amended. As amended claim 18 and 47 are no longer anticipated by Carluccio. Carluccio does not disclose a wiping device with at least one spiral finger being held in complete circumferential contact with the outside surface of a smooth conical shaped pipette tip, **providing squeegee like means to remove all of the non calibrated fluid** attached to the exterior surface of the pipette tip during the removal of the pipette tip from the wiping device. Minor corrections have been made to the specification. No new matter has been introduced. Reconsideration of the application as amended is respectfully requested.

REFERING TO THE ARGUMENTS OF THE OFFICE ACTION

Claims 18 and 20-21 and 47-58 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Carluccio US 4,390,298. As stated by the Examiner, Carluccio'298 wiper section (30) appears to make more than one full revolution. The examiner has shown a diagram indicating dotted lines which show the wiper section (30) actual makes almost two revolutions.

Applicant respectfully disagrees. In looking at the illustration the examiner has created a dotted line that begins a very small distance from the upper side of the helical formed slot (34) and then moves to the center width of the wiper section (30) which is incorrect. The line must stay parallel to the slot (34) to be correct. Let's say that distance is $\frac{1}{32}$ of an inch away from the slot (34) at the top of the examiners example. To be correct, the dotted line following the helical slot must stay $\frac{1}{32}$ of an inch above the slot (34) to determine the correct amount of rotation of the wiper section (30). This geometry holds true if you were to start the line $\frac{1}{4}$ of an inch above the slot (34) or any dimension parallel to the slot (34). The reality is the line must always be parallel to the slot (34) to determine the correct amount of rotation of the wiper section (30). In addition if you were to follow the material $\frac{1}{32}$ inch below the slot (34), you would also notice that again the wiper section (30) rotation is the same as the rotation of the slot (34), there is no difference.

In conclusion the material above or below the slot (34) forming the wiper section (30) cannot rotate more than the slot (34) that forms the wiper section (30). Thus as the examiner notes "the spiral cut (34) appears to make one full revolution." meaning the wiper section (30) would also appear to make one full revolution as shown in the illustration below.



This is very important because in Carluccio design, the wiper section (30) **only positions the wiper edge (32) and is not used as a wiping feature as so suggested by the examiner.** Furthermore, the wiper edge (32) as shown in Fig. 2 does not rotate more than one revolution and is segmented by slot (34) **to insure that all of the fluid is not removed** from the applicator brush bristles (24). In fact, it is specifically noted on Page 1, lines 23-26 “The wiper plug removes excess liquid from the rod and brush as the applicator is withdrawn from the bottle, such that only a desired amount of liquid remains on the applicator head” such that the purpose of the wiper is to leave a particular amount of fluid such as eyelash mascara or finger nail polish on the brush to be applied to eyelashes or finger nails as described in Carluccio invention. If indeed the wiper edge (32) removed all of the material from the applicator as is required in the applicant’s invention, Carluccio invention would not function, for it is the fluid that is left on the brush or the polyurethane foam that allows for the withdrawn applicator head to apply eyelash mascara or nail polish to its user.

In Carluccio, “when the applicator is inserted or withdrawn, the opening (14a) enlarges to accommodate the larger diameter bristles (24) or other enlarged applicator heads.” (Page 2, lines 40-44). Because the opening (14a) starts out at less than a full diameter due to the circumference being segmented by slot (34), as the opening (14a) increases to accommodate the larger diameter of the rod (18) and the bristles (22), the circumferential contact of wiper edge (32) begins to wrap less than one full revolution. The larger the diameter applicator brush or foam head that is **withdrawn through opening (14a), the less circumferential contact the opening (14a) will have.** The less contact means less material that will be removed from the applicator head or brush. It also means as the diameter of the applicator brush increases the amount of rotation of the wiper section (30) that positions the wiper edge (32) decreases. This of course is necessary for Carluccio invention to work.

Carluccio invention was never meant to remove all the fluid from the surface of the applicator and by **the fact that the bristles (24) of the applicator (16) obstruct the opening (14a) and wiper edge (32) from sealing about the applicator head (22)** is a design requirement. The obstruction of these bristles (22) prevents the wiper edge (32) from fully wiping the applicator head (22) is in contradiction to applicant’s invention.

In comparison, applicant's invention includes at least one spiral finger (90) rotating more than one revolution that **encapsulates an unobstructed smooth conical wall (125) of a inserted pipette tip (115)** in full circumferential contact unlike that of Carluccio. Upon axial withdrawal the spiral finger (90) removes all the residue fluid (116) from the outside (125) of the smooth conical shaped pipette (115) in a squeegee like means as shown in Figures 16 and 17 leaving only the internal calibrated fluid (119) to be transferred to another location.

In addition, the wiper section (30) of Carluccio design as mentioned was not intended to be used as wiping means but as a helical structure to mechanical position the wiper edge (32) and opening (14a) in position to wipe the applicator head (16) as describe in Carluccio patent "Moreover, when the applicator (16) is withdrawn, the rod (18) and head (22) pull the wiper edge (32) axially, and the wiper edge (32), due to the helical construction of the wiper section (30), is drawn in and around the rod (18) and thereafter the head (22) of the applicator to effectively remove excess liquid on the rod and head. "(Page 2, lines 44-49). Carlucci also states" The wiper plug may be used with different diameter rods and applicator heads, since **the diameter of opening (14a) will adjust as needed.**" (Page 2, lines 50-53) This notation and description is very specific and details the wiping structure of Carluccio to be a wiper edge (32) created by opening (14a) and not the wiper section (30).

For example, as the diameter of the applicator increases, the **circumferential contact of opening (14a) in contact with the applicator decreases** - thus maintaining much less than 360 degree contact about the obstructed applicator diameter. Therefore the large radial segment of fluid that is not in contact with the enlarged opening (14a) will be left on the applicator to be transfer to the uses eyelashes or fingernails. By comparison, this is much different than the applicant's invention which incorporates the helical wiping finger (90) in direct **circumferential contact** with the smooth conical shaped surface (125) of the pipette tip (115) to squeegee the smooth surface and **remove all the fluid (116) from the external surface (125) of the tip (115).**

Furthermore, Carluccio also is very specific in describing the wiper detail (32) of his invention "As shown, the wiper section 30 is conical and terminates in a lower annular wiper edge or rim (32) of enlarged thickness. " (Page 2, lines 31-33) This enlarged wiper edge (32) is unlike that of the applicants invention. The enlarged donut shaped structure (32) of Carluccio provides

additional strength actually preventing the opening (14a) from easily expanding as is the case whenever you mechanically want to prevent flexibility by adding a gusset or additional material to a structure. This **wiper edge (32) with the addition of the donut shaped structure is specifically designed not to be resilient** but to offer a less than one revolution scraping means for removing some but not all of the fluid attached to the applicator head. This additional donut shaped structure at the apex of the conical wiper section “may be used with different diameter rods and applicator heads, since the diameter of opening (14a) will adjust as needed.” (Page 2, lines 50-53). “In each case, the action of withdrawing the applicator tends to close-off the opening (14a), such that irrespective of the diameter of the rod 18 and the applicator head, the wiper edge (32) is held closely against the rod and against the head as each section passes through the opening (14a).” (Page 2, lines 53-57) This again very specifically describes the wiping action of Carluccio as being the opening (14a) and not the conical wall section (30) as the examiner has so stated.

It now becomes apparent that even if there was motivation to install a smooth conical shaped pipette tip (115) into the Carluccio wiping invention, it would not be able to wipe the smooth conical wall section (125) of the pipette tip (115) clean of all residue fluid (116) as applicant invention is engineered to do because:

1. Carluccio wiper opening (14a) creates wiper edge (32) as shown in Fig 1 and 2. The opening (14a) is shown as maintaining almost full circumferential contact with the exception of helical slot (34). Assuming a conical pipette tip (115) was to replace Rod (18) and began to penetrate the opening (14a) to access the fluid of container as shown in applicants Figure 16 -17. Upon penetration, the wiper edge (32) would not be capable of maintaining full circumferential contact of the conical shaped pipette surface (125) of pipette tip (115).

Note: Pipette tips are constructed with very small apex ends (114) in the range of .030 to .050 inch diameter. They are constructed with smooth external (125) and smooth internal surfaces (124) to mate with the barrels of pipetters which range from .200 -.320 inch in diameter – thus a diametrical difference of 5 times (5X) is common in the pipette tip industry with some being as large as 10 times (10X).

As **Carluccio opening (14a)** would enlarge upon penetration of the pipette tip (115), the circumferential contact about the enlarging diameter (125) of the Pipette tip (115) would decrease. As the enlarged diameter (125) of the pipette tip (115) was inserted and withdrawn, the residue fluid (116) attached to the outside surface (125) of the pipette tip (115) would remain since the wiper edge (32) created by opening (14a) could not rotate more than one revolution to accommodate the increase diameter of the smooth enlarged conical shaped pipette tip (115).

2. **Carluccio wiper edge (32) consist of a structural donut shaped gusset about its circumference for added strength** in removing fluid from the obstructed opening (14a) upon use of bristle (24) and polyurethane foam applicator head material. This added strength is necessary to prevent the lower opening (14a) from gathering about the obstruction (24) as the applicator head is inserted and removed. If a conical shaped pipette tip (115) was installed into this lower (14a) opening, as suggested by the examiner, the smooth enlargeable surface (125) would begin to expand the opening (14a) as apex end (114) began its insertion until the strength of the donut shaped gusset member (32) surrounding opening (14a) would prevent further diametrical increases. At this time, the lower wiper edge (32) creating opening (14a) would pull away from the enlarged conical diameter (125) of the inserted pipette tip (115) and would rest upon the external surface (125) of the Pipette Tip (115) instead of wrapping itself about its circumference. **Carluccio wiper edge (32) and opening (14a)** is not made to be flexible such that it can accommodate and maintain full circumferential contact of a conical pipette tip (115) that increases in diameter up to 5 times its apex opening (114). Thus it would be incapable to perform the same wiping action as noted in the claims of the applicant's invention.

In conclusion, **Carluccio** teaches an alternative type of wiping mechanism that uses a wiping section (30) to locate and position wiper edge (32) and opening (14a) to remove only a portion of the fluid while opening (14a) maintains partial circumferential contact with head (18).

There is nothing in the 4 corners of this document to suggest or teach you that the wiping plug (12) as claimed by **Carluccio** has at least one wiper finger (90) being configured to include at least one helically formed slot (112) extending from said substantial closure (113) forming at least one spiral wiper finger (90) rotating more than one revolution and being adapted to be unobstructed and resiliently held in complete circumferential contact against the smooth conical

shaped outside surface (125) of a pipette tip (115) inserted therethrough including squeegee like means to remove all the residue fluid (116) attached to said smooth outside surface leaving on the internal calibrated fluid (119) to be transferred.

Accordingly, Carluccio can not anticipate Claims 18 and 47.

Leopardi -- Pat. # 5,514,339

As suggested by the examiner, Leopardi, column 4, lines 13 – 20, teaches it is desirable to provide a wiping feature to remove excess liquid, such as blood, from the syringe (43).

Like Carluccio, Leopardi fails to disclose the invention as recited in claims 18 and 47. Leopardi does not disclose a conical resilient wiper section being configured to include at least one helically formed slot forming a wiper finger adapted to be resiliently held against the outside surface of a pipette tip inserted therethrough, said wiper finger including means to remove residue fluid from said outside surface of said pipette tip while leaving the internal calibrated fluid when said pipette tip is withdrawn axially through said wiper finger.

Moreover, as the examiner has so implied, Leopardi invention is directed to a pierceable stopper used with a syringe type needle which can adequately protect the operator from accident contact with the blood sample during the transfer of blood during the removal stage. As illustrated in Figs 4 and 7. **“The external element (42) of a twin-pointed disposable needle is introduced into the patient’s vein. Then the internal element (43) of the needle is introduced into the test tube (3) by perforating the pierceable stopper and bending the elastically yielding sectors (16) of the stopper (1).”** Page 3, lines 60-66. In applications such as describe, the syringe is a positive fluid displacement device. This is because no air is allowed in the syringe and the syringe is used to remove blood from an individual. **“The test tube thus sealed (Fig 1) maintains the predetermined vacuum, which has been provided herein, until the moment when it is necessary to take the patients blood”** Page 3, lines 56-59. The pierceable stopper as describe by Leopardi maintains an air tight seal as the syringe is inserted and withdrawn thus wiping the blood from the syringe as so described by the examiner.

This is in direct contradiction to applicant’s invention, in which a conical shaped plastic pipette tip is used with a high precision air displacement pipetter that is specifically engineered to

transfer precision amounts of fluids from one location to another. Substituting the air-displacement pipetter for the positive fluid displacement syringe will not work. Even if you were able to pierce the wall of stopper 2A as does the syringe needle (43) does, the rubber sealable stopper material would form a seal about the outside diameter of the conical shaped pipette tip and form a seal. As you tried to withdraw fluid from this air seal test tube (3) the air-displacement pipetter could not overcome the vacuum that would be created within the test tube (3) created by the pipetter's suction device as previously described in the summary section. This being the case, the fact that a positive displacement syringe needle could be wiped under these conditions could not anticipate that a conical shaped pipette tip would do the same. **This is shown to illustrate that a unworkable embodiment cannot anticipate a workable embodiment.**

The wiping mechanism as described by Leopardi is primarily directed toward the need to reduce contamination associated with accidental contact with blood from patients. Leopardi does not disclose means for removing the non-calibrated residue fluid attached to a plastic conical shaped pipette tip. There is no motivation to replace the syringe of Leopardi which is used to pierce and draw blood from a patient. Nor would a plastic pipette tip have the capability to pierce the pierceable member of Leopardi structure. Leopardi could not have been anticipated or would it have been obvious to use a plastic pipette tip since it was not his goal to remove a non-calibrated residue from the outside surface of an air displacement pipette tip.

Even if we were to replace the pierceable stopper of Leopardi with the wiping cap of Carluccio, the wiping cap of Carluccio would not be capable of wiping the small syringe needle. The opening (14a) of Carluccio cannot be created smaller than a syringe (ie: .020 inch diameter). Even if it could be manufactured, the width of slot (34) prevents full circumferential contact about the diameter of the syringe (43). Therefore, if motivation existed, and a syringe needle (43) was inserted and removed from the wiper plug (12) of Carluccio, the fluid material attached to the outside of the syringe (43) diameter would pass through the slot (34) and be transferred to its next location unlike that of applicant's invention.

In addition, it is not seen how changing a needle (43) to a pipette tip (115) would constitute "ordinary skill in the art" since a syringe (43) is a small cylindrical shaped metal device used for piercing while a pipette tip (115) is made from plastic and conical in structure incapable of

piecing. Further, Leopardi does not contain such a teaching and as shown in the above example would not work and thus could not be considered obvious to one skilled in the arts. Therefore, the rejection should be withdrawn.

Smith – Pat. # 5,513,768

The office action states Smith (Applicant is the inventor) teaches a cap for a container (12) comprising a locking cap (16) and a sealing cap (14) with a syringe port (54) and a sealing frustum (27). The embodiment of Figure 6 teaches the locking cap and syringe cap being connected to the container by hinges (22) and (38). The embodiment of Figure 13B teaches a threaded connection (188). Smith does not teach a wiping feature.

Applicants new invention includes a wiping cap, not a sealing cap (14), that is specifically engineered to incorporate a conical section with a spiral finger or fingers designed to resiliently expand and contract about a tubular conical pipette tip maintaining contact at all times with its outside surface while wiping and removing the fluid film or droplets from its surface. (Page 8, Lines 24-27).

The wiping cap is neither a sealing cap as described by previous issued patent (Smith '768) or would work as a wiping cap if a syringe as described in the Smith '768 was inserted into said wiping cap of applicant's new invention. The wiping cap of the Applicants invention is conical in design to accommodate the conical shaped standard pipette tips and not a tubular metal syringe as would be necessary to puncture said sealing cap in Smith '768. In addition, a standard plastic pipette tip could not puncture said sealing cap in Smith '768 nor access the fluid within container (12) without complete removal of said sealing cap in Smith '768.

There is no motivation to modify the structure of Smith '768 sealing cap (14) to accommodate the spiral fingers (90) require to resiliently expand and contract about a tubular conical pipette tip (115) proving full circumferential contact and providing squeegee like means. The sealing member is configured for being inserted in the open end of a tubular member with the generally convex end wall positioned in the tubular member and bulging in a direction away from the open end. With this construction, as the pressure in the tubular member increases, it tends to deflect and flatten the generally convex end wall, thereby causing the perimeter or rim of the end

wall to expand radially outward and enhance the seal between the sealing member and the inner wall of the tubular member. As a result, the sealing capacity is increased when it is most needed, i.e., when high pressure within the tubular member develops. (Page 1, 44-61)

As can be seen, if the sealing cap (14) of Smith was replaced with the structure of the wiping cap of Carluccio as suggested in the office action, the opening (14a) rotates less than one full turn as shown in Carluccio Figures 2. This would prevent the wiping edge (32) from full circumferential contact of the pipette tip inserted therethrough since it would only reach less than one full revolution and about the diameter and thus would not be capable of removing all of the non calibrated fluid as does applicants' invention.

Motivation does not exist for modifying Smith '768 in view of Carluccio for the resulting combination would not arrive at the claimed invention. Carluccio does not teach a wiping finger that rotates more than one revolution being formed from a substantially closed end that maintains full circumferential contact with smooth surface of the pipette tip providing squeegee like means to remove all of the non calibrated fluid from the outside surface of the pipette tip while leaving only the internal calibrated fluid to be transferred.

Accordingly, the rejection should be withdrawn.

Smith '768, Carluccio '298 and Leopardi '339 Do Not Contain Any Justification to Support Their Combination, Much Less in the Manner Proposed

With regard to the proposed combination of Smith '768, Carluccio '298 and Leopardi '339, it is well known that in order for any prior-art references themselves to be validly combined for use in a prior-art §103 rejection, the references themselves must suggest that they be combined, E.g., as was stated In re Sernaker, 217 U.S.P.Q. 1,6 (C.A.F.C. 1983):

“[P]rior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantages to be derived from combining their teachings.”

None of the references relied upon in the office action suggest the use of a conical shaped disposable pipette tip as is used with precision handheld pipetters as described in applicants invention for removing all of the non-calibrated fluid from the pipette tip during fluid transfer

while leaving the internal calibrated fluid to be transferred. By comparison, Leopardi uses a metal syringe needle designed specifically for piecing a patient's body and accruing a blood sample. Carluccio, on the other hand uses a brush to access a cosmetic fluid container for transferring fluid such as mascara or finger nail polish. These prior references solve recognized problems in different fields and are independent and are workable inventions by themselves with no indication whatsoever within the written embodiments of any of the patents that they could or should be modified or combined.

The office action states that Carluccio could be used to wipe excess material from a needle as that which is used in Leopardi. Leopardi discloses a needle but would not have motivated one of ordinary skill in the art to modify Carluccio to include means to wipe a needle. Even if motivation existed for this suggested modification, it would not arrive at the claimed invention for Carluccio opening (14a) is constructed to be the same diameter as the rod (18) in the relaxed or as molded condition. This diameter is much larger than head (22) as shown by Figure 1, which would be larger than a sized needle or syringe (43) as shown in Fig. 4 and Fig. 7 of Leopardi. Furthermore, even if the opening (14a) of Carluccio could be created the same diameter as Syringe (43) of Leopardi, the opening could not maintain a complete circumferential contact about the syringe diameter. **This is because the slot (34) is a defined dimension which reduces the circumferential contact to less than one full revolution** and thus the opening (14a) would never be capable of complete removal of all the fluid from the syringe (43). Therefore, the rejection should be withdrawn.

The office action suggest that it would have been obvious to modify Smith closure to add the wiping structure of Carluccio in view of the necessity to wipe a needle found in Leopardi. Even, if motivation existed for this modification, the resulting combination would not arrive at the claimed invention. Smith teaches a closure device with sealing cap but no wiping cap. Smith does not teach what Carluccio and Leopardi lack. Therefore, even if motivation existed for the suggested modification, the resulting combination would not arrive at the claimed invention. Accordingly, the rejection should be withdrawn.

Conclusion

In conclusion, the applicant was the first to recognize the advantage of a spiral wiping finger device for the elimination of all non-calibrated fluid in the transfer of liquid samples in the pipetting industry. By creating the pipetting apparatus as so describe in the application, a new and unexpected result has been achieved. That is, production will increase 2-5 times as compared to the labor intensive manner in which fluid is transferred with pipette tips today. This comes without the loss of valuable fluid sample material and the use of disposable KIMWIPES that produce waste and contamination. The unobvious and unexpected results produced by applicant's invention have long been sought after by those skilled in the art, but up until applicant's invention the results have been unobtainable.


In light of the above amendments and remarks, the applicant respectfully requests that the examiner reconsider this application with a view towards allowance. It is believed that all claims now pending recite novel and non-obvious structure and patentable define the subject invention over the cited art of record and are in a condition of allowance. Claims 19-23 and claims 48-58 depends from independent claims 18 and 47 which are believed to be in a condition for allowance. Therefore, it is respectfully submitted that these dependent claims are patentable distinguish over the cited art for at least the same reasons. Furthermore, claims 19-23 and 48-58 introduce patentable distinguishing recitations of their own and are believed to overcome the 35USC102 and 35USC103(a) rejections and define the invention in a patentable manner over the cited prior art. For all the above stated reasons, applicant submits claims 18-23 and 47-58 are all in a condition of allowance. Allowance of these claims is respectfully solicited.

Reconsideration and withdrawal of the rejections and objections is requested. If the examiner believes a telephone conference would expedite this application, please telephone the applicant at (925)-846-8256.

Conditional Request for Constructive Assistance

Applicant has amended the specification and claims of this application so that they are proper, definite, and define novel structure, which is unobvious. If for any reason this application is not believed to be in full condition for allowance, applicant respectfully requests the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P 2173.02 and 707.07(j) in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings.

Respectfully submitted,

 July 2, 2007

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